



SEQUENCE LISTING

Sub DI
<110> Meloen, Robert Hans
Oonk, Hendrica Berendina

<120> An Improved Peptide, Immunogenic Composition and Vaccine or
Medical Preparation, a Method to Immunise Animals Against the Horm
one
LHRH, and Analogs of the LHRH Tandem Repeat Peptide and their Use
as
Vaccine

<130> 2183-4518US

<140> 09/659,983

<141> 2000-09-12

<150> US 09/274,048

<151> 1999-03-22

<150> US 08/981,557

<151> 1995-06-07

<150> PCT/NL96/00223

<151> 1996-06-06

<150> US 08/447,298

<151> 1995-06-07

<150> US 08/476,013

<151> 1995-06-07

<160> 13

<170> PatentIn version 3.0

<210> 1

<211> 10

<212> PRT

<213> Sus scrofa

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<222> (1)..(1)

<223> X=pyroglutamic acid

Sub
D1
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222
223

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<400> 1

Cont
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1 5 10

<210> 2
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<213> Homo sapiens

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<223> X=Gly-NH2

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Xaa His Trp Ser His Gly Trp Tyr Pro Xaa
1 5 10

<210> 3
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<220>
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forms
GnRH/ LHRH

<220>
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<223> X=pyroglutamic acid or Gln with attached tail of one or mor

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addi

tional amino acid

<220>

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<222> (3)..(3)

<223> X=Trp or N(indole)formyl-tryptophan

<220>

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<223> X=direct bond or a spacer group between Gly at position 10
and
Gly

n at position 1

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<223> X=Trp or N(indole)formyl-tryptophan

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<222> (21)..(21)

<223> X=Gly-NH2 or Gly with attached tail of one or more amino acids

<220>

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<222> (10)..(20)

<223> variable repeat sequence <>10-20

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1 5 10 15

Gly Leu Arg Pro Xaa
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<210> 4

sub
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Cant
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GnRH/ LHRH

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<400> 4

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1 5 10 15

Leu Arg Pro Gly Xaa
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Sub
D1

~~Sub~~

D1

Cont

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GnRH/ LHRH

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~~Xaa His Thr Xaa Tyr Xaa Leu Ala Pro Gly Xaa His Thr Xaa Tyr Xaa
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~~Leu Arg Pro Gly Xaa
20~~

~~<210> 6
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forms~~

~~GnRH/ LHRH~~

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1 5 10 15

Leu Xaa Pro Gly Xaa
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forms

GnRH/ LHRH

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SW
DI
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<223> X=amino acid substitution

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1 5 10 15

Leu Arg Pro Xaa Xaa
20

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GnRH/ LHRH

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Sub
D1

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C

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1 5 10 15

Leu Arg Pro Gly Cys Xaa His Thr Ser Tyr Xaa Leu Arg Pro Gly Xaa
20 25 30

His Thr Ser Tyr Xaa Leu Arg Pro Gly Cys
35 40

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<223> A peptide suitable for eliciting an immune response against
forms

GnRH/ LHRH

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<223> X=Gly or Gly preceded by a spacer

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<223> X=D-Lys

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<223> X=Cys-NH2

Sub
DL
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1 5 10 15

Leu Ala Pro Gly Xaa
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C
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forms

GnRH/ LHRH

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SUB
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1 5 10 15

Leu Arg Pro Gly Xaa
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C
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forms
GnRH/ LHRH

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<222> (15)..(15)
<223> X=amino acid substitution

<220>
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1 5 10 15

Leu Arg Pro Gly Xaa
20

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GnRH/ LHRH

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Xaa His Thr Ser Tyr Xaa Xaa Arg Pro Gly Xaa His Thr Ser Tyr Xaa
1 5 10 15

Xaa Arg Pro Gly Xaa
20

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Sub
DI
forms

GnRH/ LHRH

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AI
Concluded
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Xaa His Thr Ser Tyr Xaa Leu Arg Xaa Gly Xaa His Thr Ser Tyr Xaa
1 5 10 15

Leu Arg Xaa Gly Xaa
20